of a router 220, a switch 225, and a national performance management system 230. The national performance management system 230 is comprised of a national database system 235 and a national reporting system 240.

5   The national performance management system 230 is configured to collect, store, and report performance information for the broadband wireless system 100. The national database system 235 is configured to store performance information for the broadband wireless system 100. The national database system 235 is an Oracle database. The national reporting system 240 is configured to report the performance information for the broadband wireless

10 system 100. The national reporting system 240 is an Apache web server.

The router 220 connects with the national data center 110, the national operations center 210, and the regional aggregation point 300 over the links 113, 116, and 117, respectively. The router 220 connects with the switch 225 over a link 211. The link 211 is a Gigabit Ethernet connection. The switch 225

15 connects with the national performance management system 230 over a link 212.

In operation, the national performance management system 230 collects performance information from other components in the broadband wireless system 100. The national performance management system 230 communicates with the other components in the broadband wireless system 100 through the

20 switch 225 and the router 220 to collect the performance information. The operation of the router 220 and the switch 225 is well known to those skilled in the art and is omitted for the sake of brevity. The national database system 235 stores the collected performance information. The national reporting system 240 retrieves the performance information from the national database system 235

25 and provides user-friendly formats of the performance information. Examples of the user-friendly formats are data files, HTML files, or other types of files. The national reporting system 240 provides other systems access to the performance information. For instance, a user system within the Internet 145 could access the national reporting system 240 and view the performance information using a Web

30 browser. Also, the national data center 110 could retrieve the performance

information from the national reporting system 240 through a File Transfer
Protocol (FTP) command and store the performance information.

FIG. 3 is a block diagram that illustrates the regional aggregation point
300 in an example of the invention. The regional aggregation point 300 is

5 comprised of a router 320, a switch 325, a regional performance management
system 330, a contention server 355, and a satellite receiver 360. The regional
performance management system 330 is comprised of a regional database
system 335 and a regional reporting system 340.

The router 320 is a GSR 12016 router from Cisco Systems. The switch

10 325 is a 6506 switch from Cisco Systems. The regional performance
management system 330 is configured to collect, store, and report performance
information for the broadband wireless system 100. The regional database
system 335 is configured to store performance information for broadband
wireless system 100. The regional database system 335 is an Oracle database.

15 The regional reporting system 340 is configured to report performance
information for the broadband wireless system 100. The regional reporting
system 340 is an Apache web server. The contention server 355 and the
satellite receiver 360 are from Cidera Co. The satellite receiver 360 is a Global
Positioning System (GPS) receiver.

20 The router 320 connects with the national operations center 200, the
Internet 145, the regional aggregation point 310, the market hub 400, and the
head end 510 over the links 117, 119, 121, 123, and 124, respectively. The
router 320 connects with the switch 325 over a link 311. The link 311 is a Gigabit
Ethernet connection. The switch 325 connects with the regional performance

25 management system 330 over a link 312. The switch 325 connects with the
contention server 355 over a link 317. The contention server 355 connects with
the satellite receiver 360 over a link 318. The link 318 is a coaxial cable.

In operation, the regional performance management system 330 collects
performance information for the broadband wireless system 100. The regional

30 performance management system 330 communicates with other components in
the broadband wireless system 100 through the switch 325 and the router 320 to

collect the performance information. The operation of the router 320 and the switch 325 is well known to those skilled in the art and is not discussed for the sake of brevity. The regional database system 335 stores the collected performance information. The regional reporting system 340 retrieves the

5 performance information from the regional database system 335 and provides user-friendly formats of the performance information. Examples of the user-friendly formats are data files, HTML files, or other types of files. The regional reporting system 340 provides other systems access to the performance information. For instance, a user system within the Internet 145 could access the

10 regional reporting system 340 and view the performance information using a Web browser. Also, the national performance management system 230 could retrieve the performance information from the regional reporting system 340 for storage in the national database system 235.

The contention server 355 receives configuration information from a

15 content delivery network through the satellite receiver 360. The configuration information is used to pre-configure the regional performance management system 330. The configuration information is also used to update or re-configure the regional performance management system 330.

FIG. 4 is a block diagram that illustrates the market hub 400 in an example

20 of the invention. The market hub 400 is comprised of a router 420, a switch 425, a market performance management system 430, a market system manager 450, a contention server 455, and a satellite receiver 460. The market performance management system 430 comprises a market database system 435 and a market reporting system 440.

25 The router 420 is a series 7500 router from Cisco Systems. The market performance management system 430 is configured to collect, store, and report performance information for the broadband wireless system 100. The market database system 435 is configured to store performance information for the broadband wireless system 100. The market database system 435 is an Oracle

30 database. The market reporting system 440 is configured to report performance information for the broadband wireless system 100. The market reporting system